2010

Annual Report

Agrichemical Management Bureau
Department of Agriculture, Trade and Consumer Protection

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Executive Summary

The Agrichemical Management Bureau (ACM Bureau) administers Wisconsin's regulatory and enforcement programs associated with commercial animal feeds, fertilizers, pesticides and other plant production and pest control materials used in agricultural, urban and industrial settings. The ACM Bureau funds, manages and enforces 11 highly interrelated programs--fertilizer, commercial feed, pesticides and pesticide use, pesticide special registrations, pesticide applicator certification and licensing, school integrated pest management, landscape registry, agrichemical containment and remediation, groundwater protection, clean sweep, and worker protection--that are centrally coordinated and implemented in the field by environmental enforcement specialists (EES). The ACM Bureau's three sections coordinate daily program activities to provide specialized knowledge in each program area and uniform regulation and enforcement.

During 2010, ACM Bureau Programs:

- ✶ Issued 13,449 Pesticide Applicator, Fertilizer, Soil and Plant Additive, Lime, Feed and Pesticide Manufacturing Licenses;
- ✶ Certified 6,060 Pesticide Applicators, for a Total of 29,799 Certified Applicators;
- ✶ Managed 171 Long-term Remediation Cases at Agrichemical Facilities;
- ✶ Responded to 37 Agrichemical Spills;
- ✶ Reimbursed $2 Million in Eligible Clean-up Costs to Responsible Parties;
- ✶ Conducted 183 Investigations Related to Pesticide, Feed and Fertilizer Programs and had 183 Enforcement Actions;
- ✶ Registered 12,067 Pesticide Products; and
- ✶ Provided over $750,000 in 52 Grants to Local Governments which Collected and Disposed of over 960,000 Pounds of Agrichemicals, Hazardous Household Wastes, and Unwanted Prescription Drugs.

Notable activities and accomplishments of the ACM Bureau during 2010 include:

- The ACCP program closed more than 75 agrichemical cleanup and spill cases.
- Clean Sweep program collected more than 900,000 pounds of waste.
- Prescription drug collection grants funded 17 requests enabling nearly 14,000 Wisconsin residents to dispose of more than 14 tons of unwanted drugs.

Fees and surcharges collected from industry are the primary source of funding for the ACM Bureau and its programs. The U.S. Environmental Protection Agency and the U.S. Food and Drug Administration also provide some funding. The ACM Bureau recognizes this important partnership with industry and the federal government and works hard to maximize the use of this funding for the benefit of the industry, consumers, and the environment.

Financial Overview

Fiscal Years and Fee Periods Covered in this Report

This financial overview covers the state fiscal year 2009-10 which ran from July 1, 2009 through June 30, 2010. Federal grants run on different cycles (October 1 through September 30) than the state fiscal year; this report covers those portions of the federal grants that occurred during the state fiscal year. Program-specific sections of the report reflect calendar year activities.

Revenues

- $7,065,375 -- ACM Fund
- $1,814,553 -- ACCP Fund
- $736,268 -- Federal Funds

Expenses

- $5,436,255 – ACM Operations
- $1,557,174 – ACCP Reimbursements
- $750,000 – Clean Sweep
- $2,602,317– Funds Collected by ACM but Used by Non-ACM Programs

Agrichemical Management Fund (ACM Fund)

The ACM Fund is the primary source of funding for the regulatory, investigative and enforcement aspects of the ACM Bureau. The ACM Fund is comprised of fees collected for licenses, permits, registrations and tonnage fees under the feed, fertilizer, soil and plant additive, lime, and pesticide programs. The Recycling Fund supports Clean Sweep grants to local governments and the revenue and expenditures for Clean Sweep grants are not included in the following tables. Revenues deposited into the ACM Fund and federal funding cover the combined costs of all the ACM programs.

The ACM Fund also supports a number of programs, including Grazing Grants (ongoing), Ag in the Classroom (ongoing), International Crane Foundation (biennium only) and Ag Investment Aids (final payment). These programs were added to the ACM Fund through the biennial budget processes.

In addition, $1,555,300 was lapsed from the ACM Fund to the General Fund during fiscal year 2009-10.

Table 1: FY 2009-10 Agrichemical Management Fund Revenue and Expenses

Source	Fee	Revenue
Feed License	$25	$ 37,719
Feed Tonnage	$0.23/ton	$ 961,698
Fertilizer License	$30	$ 22,087
Fertilizer Permits	$25 one time	$ 9,922
Fertilizer Tonnage**	$0.30/ton	$ 358,159
Lime License	$10	$ 1,040
Pesticide Application Business	$70	$ 137,316
Pesticide Dealer-Restricted Use	$60	$ 22,800
Pesticide Individual Applicator	$40	$ 271,189
Pesticide Reciprocal Certification	$75	$ 19,958
Pesticide Registration* Household sales $0-24,999	$141	$ 801,009
Pesticide Registration* Household sales $25,000-74,999	$626	$ 294,149
Pesticide Registration* Household sales $75,000 plus	$1,376	$ 631,605
Pesticide Registration* Industrial sales $0-24,999	$221	$ 214,806
Pesticide Registration* Industrial sales $25,000-74,999	$766	$ 66,461
Pesticide Registration* Industrial sales $75,000 plus	$2,966	$ 309,231
Pesticide Registration* Non-household $0-24,999	$226	$1,164,043
Pesticide Registration* Non-household $25,000-74,999	$796	$ 299,031
Pesticide Registration* Non-household $75,000 plus	$2,966 + 0.2%	$1,343,525
Soil & Plant Additive License & Permits	$25 annual lic. $100/1xpermit	$ 16,514
Soil & Plant Additive Tonnage**	$0.25/ton	$ 19,449
Veterinary Clinic Permit	$25/2 yr	$ 9,675
Special Local Needs Permit		$ 1,750
ACM Misc. Revenue (Interest, etc.)		$ 7,735
Late Fees		$ 42,387
Revenue Adjustment		$ 2,117
Revenue Total		$7,065,375
Opening Balance		$4,242,575
Expenditures		
ACM Program (see Program Staff & Expenses chart)		$5,436,255
Ag in Classroom Grant (423)		$ 65,700
Grazing Grants (427)		$ 360,919
Ag Investment Aids (425)		$ 45,405
International Crane Foundation (768)		$ 22,382
Lapse to General Fund		$1,555,300
Expenditures Total		$7,485,961
FY 09-10 Ending Balance		$3,821,989

* Pesticide registrations are deposited by statute to each fund, but the breakdown between fee levels is not recorded in the financial system. The breakdown shown here is based on apportioning the actual payments, including penalty fees, based on the estimated sales levels reported at the time of product registration.

**The Fertilizer and Soil & Plant Additive Tonnage fees were collected in 2010 for the previous year's sales.

Agricultural Chemical Cleanup Program Fund (ACCP Fund)

The ACCP Fund consists of industry fee surcharges to pay reimbursements for agricultural chemical spill cleanups. In more recent budget bills, additional appropriations have been added to this fund for other programs. During the year, the programs being funded include the University of Wisconsin Discovery Farm (ongoing) and Food Safety/Animal Health Divisions (one biennium funding). As part of the FY 09/11 Budget, the Animal Health Division received ongoing funding for staff through the ACCP Fund. In addition, $1,143,500 was lapsed from the ACCP Fund to the General Fund in fiscal year 2009-10.

Table 2: FY 2009-10 Agricultural Chemical Cleanup Fund Revenue and Expenses

Source	Surcharge	Revenue
Fertilizer License	$14 if no pesticide license	$ 6,111
Fertilizer Tonnage**	$0.44/ton	$ 521,588
Pesticide Application Business	$38	$ 74,374
Pesticide Dealer-Restricted Use	$28	$ 10,624
Pesticide Individual Applicator	$14	$ 94,934
Pesticide Registration* Non-household $0-24,999	$3.50	$ 14,924
Pesticide Registration* Non-household $25,000-74,999	$120	$ 37,320
Pesticide Registration* Non-household $75,000 plus	0.75% of sales	$1,049,761
ACCP Misc. Revenue (Interest, etc.)		$ 4,917
Revenues Total		$1,814,553
Opening Balance		$2,670,694
Expenditures		
ACCP Reimbursements		$1,557,174
Aids to County & District Fairs		$ 20,000
Animal Health Division (260)		$ 39,943
Discovery Farms (163)		$ 246,700
Lapse to General Fund		$1,143,500
Expenditures Total		$3,007,317
FY 09-10 Ending Balance		$1,477,930

*Pesticide registrations are deposited by statute to each fund, but the breakdown between fee levels is not recorded in the financial system. The breakdown shown here is based on apportioning the actual payments based on the estimated sales levels reported at the time of product registration.

**The fertilizer tonnage surcharge is for the previous year's fertilizer sales.

Other Industry Fees

In addition to the fees paid to the ACM and ACCP Funds, the ACM Bureau collects fees that are solely directed to other state agencies or programs.

Table 3: FY 2009-10 Other Agrichemical Revenues and Uses

Source	Fee and Agency	Revenue
Fertilizer Tonnage**	$0.10 DNR 0.10 UW NPM 0.10 UW Fertilizer Research 0.02 Weights & Measures	$ 118,644 $ 118,644 $ 118,644 $ 23,810
Feed Tonnage	$0.02 Weights & Measures	$ 83,598
Lime Tonnage**	$0.0125 UW Liming Materials Research	$ 12,616
Pesticide Registration* Household sales $0-24,999	$124 DNR	$ 583,172
Pesticide Registration* Household sales $25,000-74,999	$124 DNR	$ 48,236
Pesticide Registration* Household sales $75,000 plus	$124 DNR	$ 47,120
Pesticide Registration * Industrial sales $0-24,999	$94 DNR+$5 for some wood preservatives	$ 75,680
Pesticide Registration* Industrial sale $25,000-74,999	$94 DNR+$170 for some wood preservatives	$ 6,938
Pesticide Registration * Industrial sales $75,000 plus	$94 DNR+1.1% for some wood preservatives	$ 67,710
Pesticide Registration* Non-household $0-24,999	$94 DNR	$ 400,816
Pesticide Registration* Non-household $25,000-74,999	$94 DNR	$ 29,234
Pesticide Registration* Non-household $75,000 plus	$94 DNR	$ 35,250
Primary Producer Fee	$150 DNR (Well Comp.)	$ 22,650
Soil & Plant Additive Tonnage**	$0.10 DNR 0.10 UW Fertilizer Research (deposited in fertilizer tonnage account)	$ 7,256 $ 7,256
Revenue Total		$1,807,274
Uses		
DNR		$1,442,706
UW		$ 251,154
Weights and Measures		$ 107,408
ACM Fertilizer tonnage 3.5% administrative fee		$ 4,406
Lapse to DOA (UW Liming Materials Research)		$ 1,600
Uses Total		$1,807,274

* Pesticide registrations are deposited by statute to each fund, but the breakdown between fee levels is not recorded. The breakdown shown here is based on registration records for each fee level.

**The fertilizer, Lime and Soil & Plant Additive Tonnage fees were collected in 2010 for the previous year's sales.

Federal Grant Funds

The Bureau receives grants from three federal agencies:

- Environmental Protection Agency (EPA)
- Department of Agriculture (USDA)
- Food and Drug Administration (FDA)

The EPA pesticide grant is the largest of these grants and is for implementing, investigating and enforcing federal pesticide use laws and regulations. The USDA grant provides funding for inspection of restricted-use pesticide records on farms. Our cooperative efforts with FDA, include the inspection contract and the Bovine Spongiform Encephalopathy (BSE) expansion grants. These grants provide funds for inspection of certain higher risk medicated feed producing establishments and allows for monitoring of the effected industries, including feed manufacturers, ingredient transporters and ruminant animal feeders, which are all regulated by the BSE feed ban.

Table 4: Federal Grant Funding During State FY 2009-10

Granting Agency	Purpose	Total Expended
Environmental Protection Agency	Pesticide regulation and enforcement, applicator certification and special projects	$511,640*
Food and Drug Administration	Medicated feed mill inspections	$ 91,042
Food and Drug Administration	BSE Expansion grant	$ 69,292
U.S. Department of Agriculture	Pesticide recordkeeping	$ 19,368
	TOTAL	$691,342

*This total includes EPA grants awarded for FFY09 and FFY10 that were expended in SFY10.

Other Grants and Special Projects

The ACM Bureau received one non-federal grant in FY 10 used to update and compile existing groundwater databases into one system.

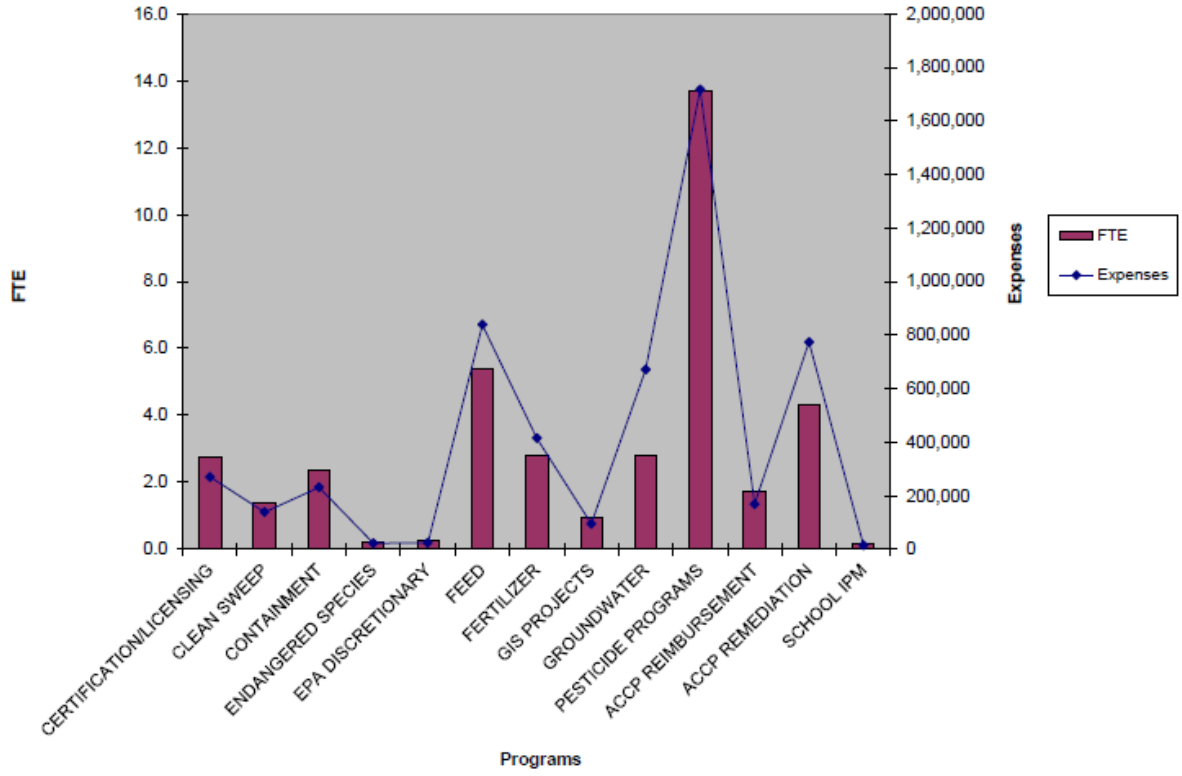
Table 5: Non-Federal Grants

Source	Purpose	Total Expended
Department of Health & Family Services (provider for EPA)	Environmental Public Health Tracking grant used to update groundwater databases	$20,391
	TOTAL	$20,391

FY 2009-10 Program Expenditures

The program costs reported for each program are based on time reports kept by staff, multiplied by their respective salary and fringe costs and combined with each program's laboratory expenses. Compliance Section and laboratory staff time is distributed throughout the various programs per their time sheet reporting of investigations, inspections and other work in each program. Supply and service costs that are not uniquely related to a single agrichemical program are pro-rated across all these programs based on agrichemical staff hours spent in each individual program.

Chart 1: Distribution of Staff Time and Expenses by Program



Note: The above chart does not include Clean Sweep grants to local governments or ACCP reimbursement payments.

Agricultural Chemical Cleanup Program

The Agricultural Chemical Cleanup Program (ACCP) directs the cleanup of pesticide and fertilizer spills (both one-time and long-term resulting from daily handling practices) to minimize contamination of surface water, groundwater and the surrounding environment by ensuring that spill cleanups are conducted effectively and in a timely manner. The program also provides reimbursement for a portion of eligible cleanup costs incurred by the responsible persons.

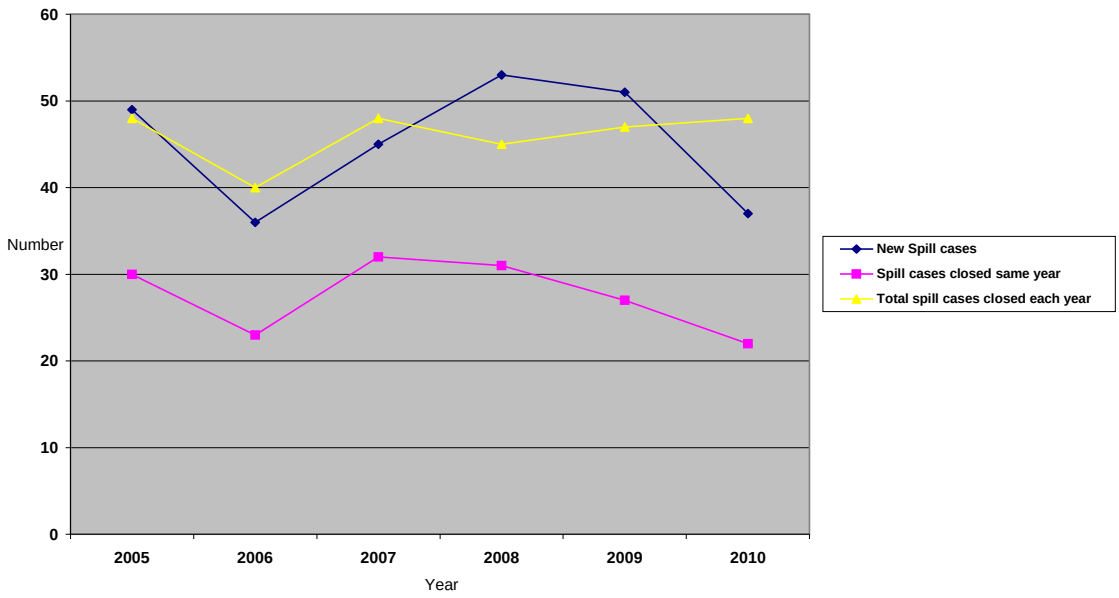
ACCP Highlights

- ✶ 15 New Cases
- ✶ 171 Active Long-term Cases
- ✶ 37 New Spill Responses
- ✶ 29 ACCP and 46 Spills Cases closed
- ✶ 244 Workplans Reviewed
- ✶ 195 Cost Estimates Reviewed
- ✶ 22 Landspreading Permits Approved

Program Activities

In calendar year 2010, the Remediation Program closed 29 cleanup cases. The current number of active cleanup sites at the end of the year was approximately 171. The ACCP program continued to operate with staff reductions due to budget constraints. Regardless, program staff sampled numerous agrichemical dealerships and opened 15 new cleanup cases. Although up from four the year before, the 15 new cases is significantly less than the number of cases closed over the same period. In addition, staff responded to 37 spills, closed 22 of them, and closed 24 spill cases from previous years.

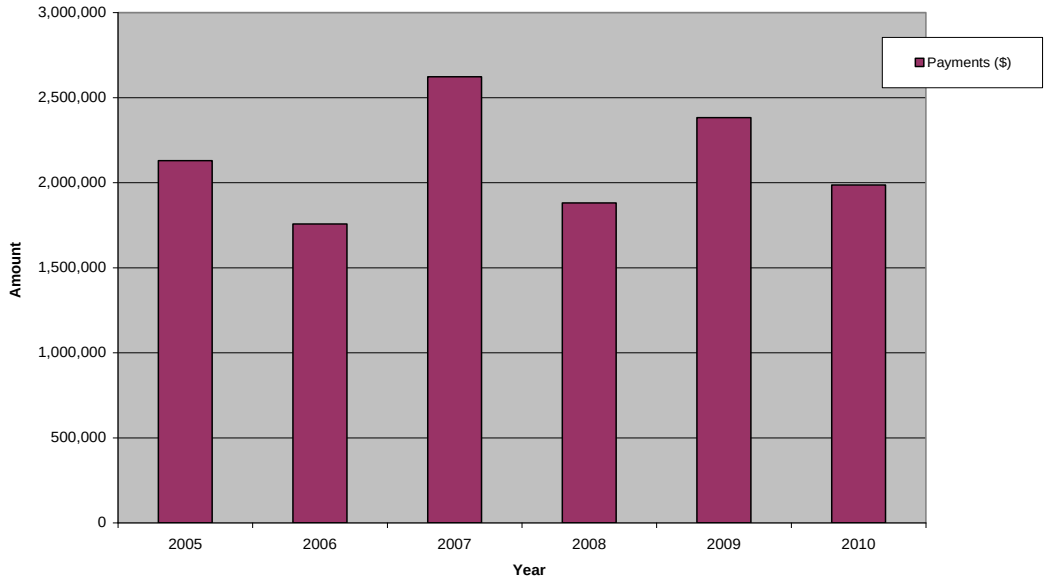
Chart 2: Number of Spill Cases by Year (2005-2010)



Remaining open spill cases will be closed following completion of investigative and remedial actions and land spreading of contaminated soil. Program staff also reviewed 244 workplans and 195 cost estimates, and issued 22 landspreading permits.

During calendar year 2010, the Reimbursement Program received 58 applications for reimbursement, totaling $2,732,322 and the ACCP Fund paid a total of $1,986,473 in reimbursements in CY 2010.

Chart 3: ACCP Reimbursement Payments by Year (2005-2010)



Emerging Issues

Few new cases were initiated in 2009 as a result of staffing shortages, but the program added 15 new cases in 2010. As investigation and cleanup work is performed at these new sites, it is not likely that the costs for such work will be submitted for reimbursement by the ACCP until 2012 or later. Reductions in staff over the past three years reduced the number of new cases coming into the ACCP relative to the number of cases being closed over the same period. The overall affect on reimbursement dollars over time brought about by a reduced number of cleanup sites is not likely to be seen for another year or two due to the lag time between when work is performed and when it gets reimbursed by the ACCP.

Agrichemical Containment

The Agrichemical Containment program requires the use of approved containment structures to help prevent spills of bulk pesticides and fertilizers from contaminating soil and groundwater. ("Bulk" means more than 55 gallons of liquid or 100 pounds of dry fertilizer or pesticide.) The program rules only apply to agrichemical facilities and dealerships, not farms.

Agrichemical Containment Highlights

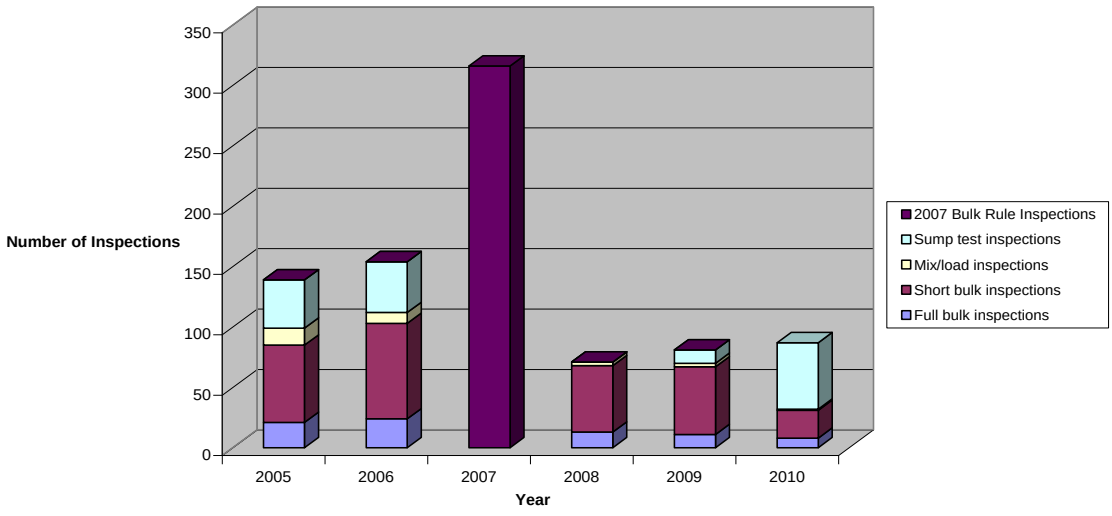
- ✶ 87 Inspections Conducted
- ✶ 7 Containment Investigations Performed
- ✶ 12 Warnings Issued
- ✶ 22 Engineering Plans Reviewed for 12 Different Projects

Environmental Partners is a subset of the Containment program that emphasizes voluntary pollution prevention efforts at agricultural chemical storage and dealership sites. Despite initial high interest in this program by dealership owners and operators, interest has decreased. Since 2007, staff vacancies and hiring freezes have prevented DATCP efforts to expand enrollment in this voluntary program. The program will be discontinued in 2011.

Program Activities

The chart below summarizes inspections completed by DATCP's containment program over the last six years.

Chart 4: Agrichemical Containment Inspection by Year (2005-2010)



In 2007, one year after a major revision of our bulk pesticide and fertilizer storage rules, the program made an effort to visit every bulk facility to perform a "2007 Bulk Rule Inspection." These inspections were one-time only and specifically aimed at educating facilities about the new rule and inspecting the facilities to determine how the new rule would affect each facility.

Emerging Issues

DATCP anticipates that there will be a demand for design plan reviews in the autumn of 2011. This is expected every year. Although DATCP has suggested to the industry that construction planning be performed with plans initially submitted in spring of a given year for autumn construction, the realities of agribusiness suggest that financial planning only allows for construction planning in late summer. While this often limits the amount of time available for iterative plan review revision (in an effort to construct before freezing weather), DATCP has been able to meet the construction schedule of most facilities.

In 2010, six of the 55 facilities where sumps were inspected had sumps that were found to be leaking. In 2011, DATCP will continue emphasizing sump test inspections (assessing if secondary containment sumps are liquid tight and not leaking contaminants). Although short and full bulk inspections are useful tools to assess a facility's compliance and thus protect the waters of the state, sump test inspections are a more direct way of assessing potential environmental contamination and compliance with mix/load containment requirements.

Clean Sweep

Wisconsin Clean Sweep offers grants to local governments for the collection and disposal of agricultural (Ag), household hazardous wastes (HHW) and unwanted prescription drugs (Rx). Farms (both active and abandoned), households, and certain businesses, called "Very Small Quantity Generators (VSQGs)" are eligible to use Clean Sweep services. The program's goal is to help create options for Wisconsin residents and businesses to protect themselves, their livestock, pets and the environment from the harmful effects of improper waste storage and disposal.

Clean Sweep Highlights

- 52 Grants
  - 15 Agricultural
  - 20 HHW
  - 17 Prescription Drug
- 963,807 Pounds of Waste
  - 141,644 lbs. Ag/VSQG
  - 793,975 lbs. HHW
  - 28,188 lbs. Rx
- 33,484 Residents, Farms and Businesses Served

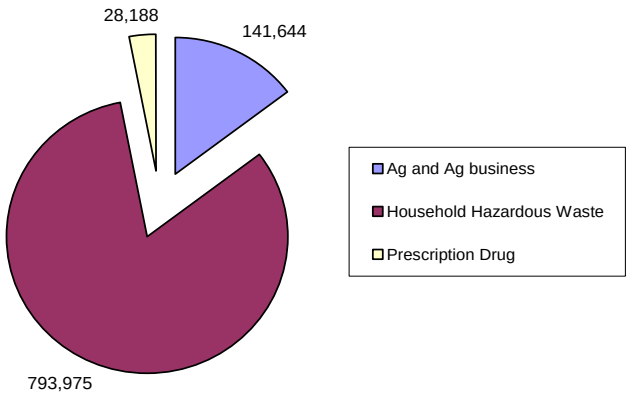
Program Activities

In 2010, DATCP awarded grants to every eligible applicant. 50 counties, eight cities and villages and five tribal nations were beneficiaries of one or more types of the 20 HHW, 15 Ag, and 17 Rx grants made available. Some grantees were multi-municipal partnerships, reaching broad geographic areas.

In 2010 only the amount of pharmaceutical clean sweep waste increased from 2009, while HHW and Ag each decreased. However, the amount of waste collected varies widely each year, and is dependent on the population of the communities using the program, and the frequency with which they run a clean sweep program.

In 2010, 492 farmers and 216 agricultural businesses brought in 141,644 pounds of agricultural wastes, a 52% decrease over the 2009 total of 294,751 but similar to the 2008 total of 137,000 pounds. Likewise, both 2009 and 2007 ag results were comparable, which supports the observation of counties who report that offering ag collections no more frequently than every two years may be the most productive in terms of committing resources to the cyclical demand for services. Patterns and anomalies may also be a consequence of fewer family farms, the increased use of commercial pesticide application (where leftover chemical can be applied to the next customer's land rather than discarded) and successful elimination of old, stockpiled pesticides no longer needed, effective or registered.

Chart 5: Clean Sweep Pounds Collected (2010)



The 2010 Clean Sweep Program served nearly 19,000 residents in safe disposal of 793,975 pounds of household hazardous waste: an average of 42 pounds per person. Although a significant amount, there were 40 percent fewer customers and 35 percent less waste collected than in 2009, reflective of 30% fewer HHW grants sought and issued in 2010 than in 2009.

HHW waste intake continued to outpace Ag waste intake by about a 6:1 margin in 2010, a closer margin than previous years.

The Wisconsin Crop Protection Association (WCPA) provides a service for farmers and businesses to recycle 2-½ gallon pesticide containers and mini-bulks. DATCP distributes WCPA's collection schedules when they are available. Staffing changes at WCPA and contract issues resulted in no recycling data for 2010. A contractor was secured for next year and 2011 data is expected to be available in early 2012.

2010 Prescription Drug Collection Grant Program

In 2010, the department funded 17 grant requests for about $102,000. 13,776 residents delivered approximately 14 tons of unwanted drugs for disposal, an average of 2 pounds of unwanted, waste medications per person.

The department participates on the Wisconsin Pharmaceutical Waste Working Group, whose mission is to reduce the negative impacts of pharmaceutical waste on Wisconsin's environment and communities. Group membership includes local government, healthcare, drug, regulatory and science professionals.

Emerging Issues

Clean Sweep grants are issued to local governments for a calendar year. However, the funds for those grants are not available until July 1 of the contract year. During biennial budget years, the funds to honor the existing contracts are not assured until the budget bill is finalized. This is expected to be a point of concern and possibly reduce participation in 2011.

Grant recipients had a high rate of staff turnover toward the year's end, contributing to about 35% of the final reports being delayed, incomplete or inaccurate, thus delaying their municipalities' reimbursement from the grant. Clean Sweep staff will work with grant recipients to improve reporting and reimbursement in 2011.

In 2010, there was increased cooperation from the law enforcement profession to solve controlled substance waste management challenges and oversee pharmaceutical waste collection sites throughout the state. We expect this will grow in 2011.

Compliance and Investigation

The Investigation and Compliance Section performs investigations related to the Agrichemical programs including feed, fertilizer/related products and pesticides. These cases could involve product distribution, storage, use, disposal or environmental contamination.

Compliance and Investigation Highlights

- ✶ 183 Investigations
  - 105 with Violations
  - 69% Violation Rate
  - 126 ATCP 29 Pesticide Related Cases

The Compliance Section has 14 Environmental Enforcement Specialists (EES) who conduct inspections and investigations for the ACM Bureau. The vacated Section Chief position was filled by one of the EES supervisor staff. This supervisor position was then converted to an Investigations Program Manager and was filled by one of the EES. With the one EES staff position vacant from prior years, and the fact that three additional EES positions became vacant at the end of 2010, the Section was able to hire four EES positions to begin in 2011.

Program Activities

In 2010, the section conducted 183 investigations. ATCP 29 pesticide investigations are the largest area of activity. Of the total investigations, 126 cases involved alleged violations of ch. ATCP 29, Wis. Adm. Code, Pesticide Use and Control, 87 of the 126 cases (69 %) resulted in a pesticide law violation. The section also conducted an investigation of pesticides or nitrates exceeding health standards in groundwater and 29 new site-remediation cases.

Included in the total of 183 investigations are 1 groundwater, 29 remediation, 126 pesticide (ATCP 29), 7 containment, 17 feed, 2 fertilizer and 1 seed case (provided assistance to the seed program). Excluding groundwater and remediation, 105 cases had documented violations. The total violation rate in 2010 for investigations was also 69 percent.

Chart 6: Types of Pesticide Cases (2006-10)

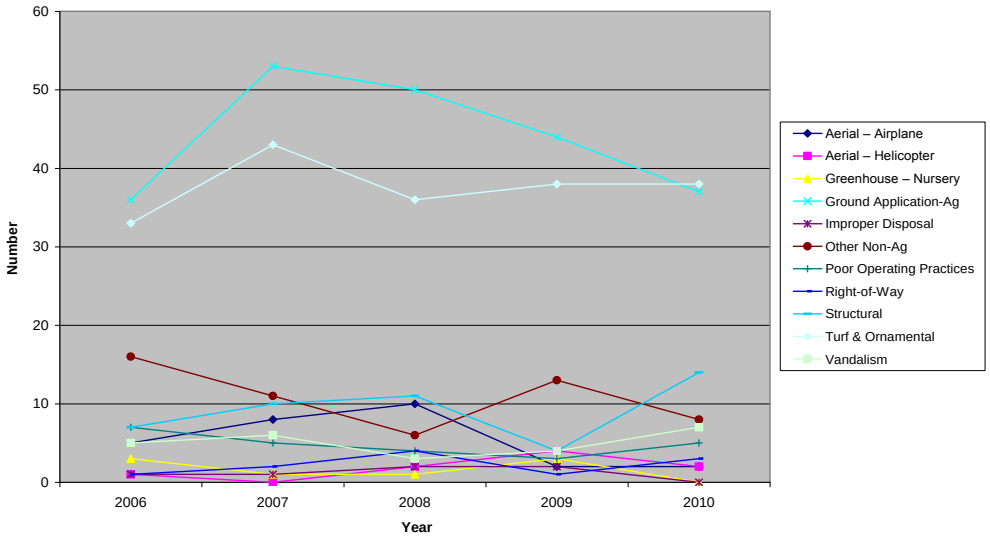


Chart 6 shows the type of pesticide cases over the last five years. Of the 126 pesticide investigations three involved documented worker protection violations.

Violations may result in actions ranging from verbal warnings to court action invoking civil or criminal penalties. A majority of the formal enforcement actions are conducted by the section through stipulated settlements, with court documents being prepared by the section. Pesticide violations involving federal requirements can be referred to the EPA for further action; two referrals were made to EPA this year. Table 6 shows the number and type of enforcement actions taken during 2010. At the end of 2010 there were 45 cases with civil forfeiture actions pending in the court system.

Table 6: Compliance Actions Taken in 2010

Action Taken	Number of Actions
Informational letters	3
Letter of Concern	13
Warning Notice – Investigator	38
Warning Notice – Office	16
Administrative Conference	42
Administrative Order	6
Civil Forfeiture Action	55
Criminal Action	3
Referred to US EPA	1
Total	183

The department assigns the highest response priority to complaints involving human exposure to pesticides. In 2010, staff investigated five cases involving potential human exposure and found exposure or pesticide violations in two of these cases.
The section investigated 44 complaints of pesticide drift in 2010 and documented drift violations in 23 of these cases. The section investigated four complaints of pesticide drift from aerial applications, and determined that violations occurred in three of these cases. Warning notices were issued on 18 occasions where an investigation or inspection was not conducted, but violations were uncovered. These violations are not included in the totals.

Feed

The Feed program's purpose is to assure the public and manufacturers that animal feed and feed ingredients are unadulterated, meet label guarantees, and are safe and effective for use. This is accomplished by feed mill and transporter inspections and surveillance sampling under authority of §94.72, Wis. Stats. and ch. ATCP 42, Wis. Adm. Code.

Feed Highlights

- ✶ 1345 Licenses Issued
- ✶ 4.07 Million Tons Sold
  - ▪ 3% Decrease from 2009
- ✶ 242 Inspections Conducted
- ✶ 85 Medicated Feed Samples Analyzed
- ✶ 46 Significant Violations Identified

The feed program work includes sampling, performing field investigations, issuing licenses, collecting and auditing tonnage fees, reviewing labels for compliance with the feed law, and conducting education, training and information outreach activities with the industry, consumers and field investigators.

Program Activities

The feed industry has been fairly stable, showing little change in the numbers of licensed manufacturers and distributors over the past several years. However, the feed industry does appear to be slowly phasing out smaller companies and consolidating facilities. During 2010, the department issued commercial feed licenses to 1345 firms. Although this demonstrates that the number of licensees has remained steady, the overall number of licensees producing feed has decreased. Companies that operate more than one manufacturing facility seem to be shifting resources and manufacturing activity to one central facility. This facility then sends out finished product to the smaller mills (within the company) that now act as retail facilities. These firms distributed a collective 4.07 million tons of commercial feed and feed products, a 3% decrease from 2009.

Table 7: Summary of Feed Program Activities (2006-10)

	2006	2007	2008	2009	2010
Total Licenses	1,270	1,340	1,312	1350	1345
Total Tonnage (estimated)	3,720,000	3,600,000	3,500,000	4,200,000	4,070,000
Number of Federal Inspections (BSE and Medicated Feed)	215	302	189	168	168
Number of GMP Inspections	95	81	100	74	74
Total Number of Inspections	310	383	289	269	250
Number of Samples	124	111	66	92	85

The program continues to monitor compliance through Good Manufacturing Practices (GMP) inspections supported by product sampling. The GMP inspections are a detailed review of systems and practices that are essential to maintain safety of medicated feeds and

medicated feed ingredients. The inspection process evaluates a firm's facilities and equipment, and the receipt, use and distribution of medicated feeds and feed ingredients. It also documents practices to ensure compliant feed and ensures facilities are able to trace non-compliant feed into the marketplace or back to suppliers, to protect animals and consumers. During GMP inspections, samples of feeds and components may be collected for analysis. These samples are examined for drug concentrations and contaminants and also confirm quality guarantees.

Compliance Activities and Special Projects

In 2010, staff completed 74 GMP inspections and collected and analyzed 85 medicated feed samples at Wisconsin medicated feed producers. The number of feed samples collected decreased slightly from 2009 to 2010. This decrease was the result of simply not having as many medicated feeds to sample, given the facilities that were inspected this year. The samples assist in the assessment of a facility's ability to produce feeds that are not misbranded or adulterated. From the inspections, the program identified 46 suspected violations of feed regulations. This is more than double the noted violations from the previous year. This dramatic increase in violations can be attributed to the fact that most of the facilities that were found to be in violation had several violations noted at the same facility. This may be due to the fact that some of these facilities have an increased workload and therefore an increased risk of violating feed laws, or it may be due to the fact that one violation often creates another violation. For example, a facility with poor medicated ingredient recordkeeping (violation) may be more apt to create an overmedicated feed (violation). The noted violations were similar to violations identified during previous inspections, typically failure to follow good manufacturing practices.

Industry Compliance Assistance: As needed, field staff and office associates assist industry feed manufacturers and labelers to better understand state and federal feed regulations. These topics include common areas of violation and inquiry by industry personnel. Program staff will monitor future inspections and industry inquiries to see if there is a need for industry training or outreach focusing on certain areas.

FDA Inspection Contract: Mills that use certain types of medications and antibiotics in feed products are required to hold a medicated feed license with the FDA. The FDA contracts with DATCP to inspect these mills. Staff inspected eight of these mills in 2010. FDA also contracted with the department to inspect feed manufacturers for compliance with 21 CFR 589.2000, Animal Proteins Prohibited from Use in Ruminant Feeds. This federal regulation is commonly known as the Bovine Spongiform Encephalopathy (BSE) Feed Ban. In 2010, staff completed 168 contract inspections, about the same as were performed in 2009.

Feed Investigations: Field staff also follow up on feed complaints and initiate investigations based on initial information collected. In 2010, there were 11 complaints that initiated investigations. Of these investigations, five are ongoing, two resulted in the issuance of a warning notice, two resulted in the issuance of a letter of concern and two that were unable to show an adulterated feed source. There were also two facility fires that were followed up on to ensure any resulting contaminated feed was disposed of properly.

Toxic Response: The commercial feed specialist serves as DATCP's coordinator for toxic response investigations. These cases involve illness or death of primarily food producing

animals from unknown causes. Toxic response cases may also result if non-food producing animal deaths of significance occurs. In 2010, no toxic response cases were initiated.

Homeland Security & Safe Food/Safe Feed: Feed program staff worked with other department personnel to develop, test and implement response plans to protect the state's animal industries from potential bio-terrorist attacks, radiological releases, natural disasters and foreign animal disease outbreaks. This includes involvement with the Multi-State Partnership for Security in Agriculture, Association of American Feed Control Officials,

Emerging Issues

FDA new Food Safety Modernization Act:
In January 2011, the Food Safety Modernization Act (FSMA) was signed into law. The purpose of FSMA is to prevent food-borne illness outbreaks. The Act includes new FDA powers, new FDA responsibilities and activities, new food import requirements and an ambitious schedule for increased facility inspections. The passage of this law will have a significant impact on the feed industry, as it will require feed manufacturing, processing, and packaging facilities to have Hazard Analysis and Preventative Controls in place and maintain more extensive records of feed and feed ingredients. An increase in the frequency of facility inspections will promote compliance with these new regulations.
Since it is not yet known if FDA will have the increased budget to allow for the hiring of new inspectors, it is believed that FDA will rely heavily on state agencies to perform an increasing number of inspections under federal contracts.

Increased Need for Emergency Preparedness and Planning (Nuclear release, natural disasters, bio-terrorism, animal disease, etc.): Due to an increased awareness of the impacts that natural disasters, terrorist attacks and radiological releases could have on Wisconsin's agricultural community (as seen during recent events in Japan involving earthquakes, tsunamis and subsequent radiological releases), it has become necessary to ensure that DATCP is prepared for these types of emergencies. DATCP has been working with Wisconsin Emergency Management (WEM) and other agencies, to ensure that we have systems in place and are well-prepared for these situations. Several exercises have been completed and will continue to be held that focus on this task. Internal policies have also been established and will continue to be created that will address potential problems.

Wal-Mart/Sam's Club "Green" Initiative:
Wal-Mart/Sam's Club stores, in an effort to go green, are experimenting with sending less food waste to landfills by diverting it to animal feed. This has been and is currently being done, on a much smaller scale, with local grocery stores or restaurants selling or giving away food waste products to local animal producers. This may include plate waste, spoiled food, expired food, non-saleable organic material, etc. The concern here is that there could be implications with *Bovine Spongiform Encephalopathy* (BSE) if discarded pet food or other products that could contain prohibited material were fed to ruminants. Cut flowers and plant material have a risk of carrying pesticide residues. Foreign material could make its way into the collection containers. Since Wal-mart/Sam's Club stores have a national presence this has the potential of becoming a much larger issue. This program is in its experimental stage and is currently only being implemented at a handful of locations in the south.

Fertilizer/Soil and Plant Additives/Lime

Fertilizer/Soil or Plant Additives/Lime Highlights

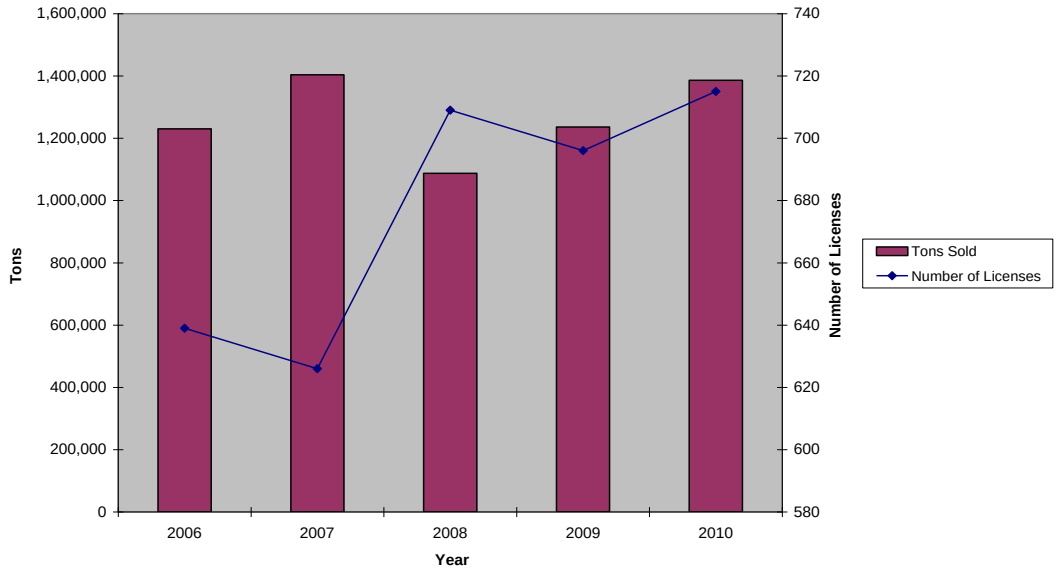
- ✶ 965 Licenses Issued
- ✶ 2,409,000 Tons Sold
  - 1,386,000 Tons of Fertilizer
  - 73,000 Tons of Soil and Plant Additives
  - 950,000 Tons of Lime
- ✶ 329 Samples Analyzed
  - 70% Met Guarantees

The Fertilizer, Soil or Plant Additive and Lime (Fertilizer) program is responsible for enforcing the laws and rules under §94.64, §94.65, §94.66, Wis. Stats., and ch. ATCP 40 and 41, Wis. Adm. Code. This program regulates agricultural, household, commercial lawn care, athletic turf fertilizer, soil or plant additives and agricultural lime. The primary goals of the program are to protect consumers against unfair and deceptive practices in the sale of these products; to protect businesses against unfair and deceptive methods of competition; and to prevent certain hazards to persons, property, and the environment. Manufacturers, labelers and distributers of these products are required to be licensed and product labeling must be approved and/or permitted before being distributed into the state. The label review and permitting process ensures that products sold in the state are efficacious, useful, and not misleading. The department inspects fertilizer blending facilities and collects and analyzes samples in order to ensure that the products meet their label guarantees.

Program Activities for 2010

The fertilizer, lime and soil and plant additive tonnages identified in the following paragraphs and listed in the tables below represent the tons of product sold in the year prior to the reporting year.

Chart 7: Fertilizer - Tons Sold and Licenses Issued (2006-10)



The fertilizer licensing year is August 15th until August 14th of the following year. As Chart 7 indicates, in 2010 the program issued 715 fertilizer licenses, compared to the 696 issued in

2009. Two-hundred seventy four products were permitted for distribution as non-agricultural or special agricultural use fertilizers in 2010 and an additional two-hundred twenty were determined to be exempt from requiring a permit. The fertilizer tonnage report for the 2009-2010 is 1,386,027 tons, a slight increase from the 1,172,166 million tons in the previous year.

Table 8: Lime Program Summary 2005-10

Reporting Year	Number of Licensees	Tons Sold
2005	92	1,163,760
2006	90	1,162,145
2007	93	997,438
2008	94	784,152
2009	97	1,002,243
2010	105	950,047

License numbers for the liming industry have increased slightly from 97 in 2009 to 105 in 2010. The licensing period for liming materials runs from January 1st until December 31st of the same year; tonnage reports are not due until February 1st of the following year. Table 8 shows the number of tons decreased slightly from 950,047 tons in 2010 from 1,002,243 tons in 2009. Lime products do not require a permit for distribution.

Table 9: Soil or Plant Additive Program Summary 2005-10

Reporting Year	Number of Licensees	Permits Issued	Tons Sold
2005	77	72	10,089
2006	70	23	4,806
2007	74	35	35,044
2008	121	208	7,931
2009	131	78	48,122
2010	145	62	73,182

The soil or plant additive licensing year is from April 1st until March 30th the following year. The number of soil or plant additive licenses issued in 2010 was 145, more than a 10% increase from 2009. In addition, 62 new products were permitted for distribution as soil or plant additives in 2010. The total tons of soil or plant additives during the 2010 reporting period was 73,182 tons, a significant increase from the 48,122 tons in 2009. The increase in tonnage reported is a direct result of the large increase in permits issued beginning in 2008.

In 2010, the department's laboratory staff analyzed 329 fertilizer samples from blending facilities, which included liquid, dry bulk and bagged fertilizer. Approximately 70% of all samples collected and analyzed met their required guaranteed nutrient content and economic value. This is a slight decrease from 71% in 2009. In 2010, 46.6% of liquid fertilizer did not meet the label guarantee compared to 52% in 2009. Dry bulk fertilizer that was mislabeled in 2010 was 24.7% which is an increase from the 23% in 2009. Mislabeled bag fertilizer also increased to 38.3% in 2010 from 37% in 2009.

The department is concerned with the high fertilizer sample failure rate over multiple years, indicating the industry is not meeting label guarantees and consumers may not be receiving the product they purchased. Program staff conducted several site visits to fertilizer blending facilities at the end of 2010 to discuss issues of concern, including equipment and blending processes. The program issued letters of concern and discussed possible solutions to improve the performance at these facilities; in one case, the facility of concern went out of business in 2011. Increased sampling was also done at sites of concern in 2011, and the

Department will be taking additional compliance actions—including compliance assurances and special orders--to address specific sites with ongoing problems.
During 2010, the department also implemented a law created in 2009 that restricts the use, sale, and display of turf fertilizer labeled as containing phosphorus or available phosphate. Internet web pages and other outreach material were developed to inform retailers, homeowners, managers of public parks, golf courses and athletic fields, and the lawn care and landscaping industries of the new restrictions. The department also provided information on the new law by participating in the Wisconsin Turfgrass Association Convention and the Wisconsin Lakes Convention, both in the spring. The department observed few alleged violations of the new fertilizer law during its first year of implementation. The intent of the new law, which became effective April 1, 2010, is to help minimize the run-off of phosphorus, which can lead to algae blooms, into the state's lakes, rivers and streams.

Compliance Actions

Based on historical data, 23 fertilizer blending facilities were assigned increased compliance sampling in 2010. Site visits were conducted at five fertilizer blending facilities that have blending deficiencies. Department staff outlined labeling requirements and measures that should be taken to ensure properly labeled fertilizer products.

Program Focus

For 2011, as a result in an increase in facilities not meeting fertilizer guarantees, the fertilizer program will focus on increased sampling at fertilizer blending facilities. All facilities are sampled by program staff on a routine basis, and additional sampling will be conducted at facilities that had multiple samples not meeting guarantees in 2010. The program will initiate additional enforcement measures at facilities that do not show improvement.

Pesticide Applicator Certification and Licensing

DATCP is responsible for administration of the state's pesticide applicator certification and licensing program. The related licenses and permits include:

- **Business location license**, required for any business making for-hire pesticide applications.
- **Individual commercial applicator license,** required for persons applying any pesticide on a for-hire basis--excluding janitorial use of sanitizers, disinfectants and germicides--and any person using a restricted-use pesticide as a commercial applicator.
- **Restricted-use pesticide dealer license**, required for pesticide dealers selling restricted-use pesticides.

Pesticide Applicator Certification and Licensing Highlights

- ✶ 29,799 Total Certified Applicators
  - 15,822 Private
  - 13,977 Commercial
  - 6,060 Were Certified in 2010
- ✶ 9,862 Licenses
  - 1,996 Business Location
  - 7,400 Individual Commercial
  - 386 Restricted Use Dealer
- ✶ 39 Training Sessions

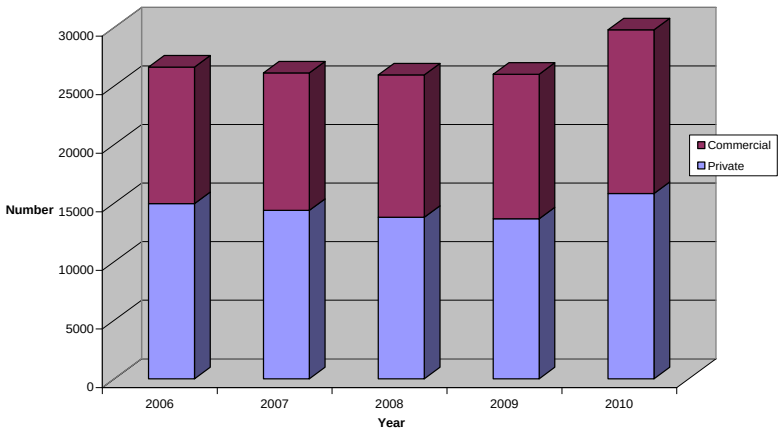
Veterinary clinic permits were discontinued during 2010 in response to 2009 Wis. Act 139, which repealed a statutory provision that required veterinary clinics to have an annual DATCP permit to use, repackage or prescribe pesticides as part of a veterinary treatment.

Program Activities

Commercial *for-hire* pesticide applicators and handlers must be both licensed and certified, whether they are using restricted-use or general use pesticides. Commercial *not-for-hire* applicators must be certified and licensed only if applying or handling restricted-use pesticides.

In 2010, there were 6,525 licensed commercial for-hire applicators, and 1,292 licensed commercial not-for-hire applicators. Of the commercial not-for-hire applicators, 910 of these license holders were employees of governmental or educational institutions. The licenses must be renewed each year, but the certification exam per category is taken every five years. Commercial applicators can be certified in 20 different application categories.

Chart 8: Total Certified Applicators (2006-10)



Private applicators must be certified if applying or handling restricted-use pesticides on property used for the production of an agricultural commodity which is owned or rented by the applicator or their employer. Private applicators can be certified in six different categories. A private certification exam must be taken every five years.

Emerging Issues

During 2010, program staff continued to work on the ATCP 29 rule change. Revisions to the rule may impact certification and licensing categories or requirements. Public hearings on the rule are expected in 2012.

Pesticide Programs and Product Licensing

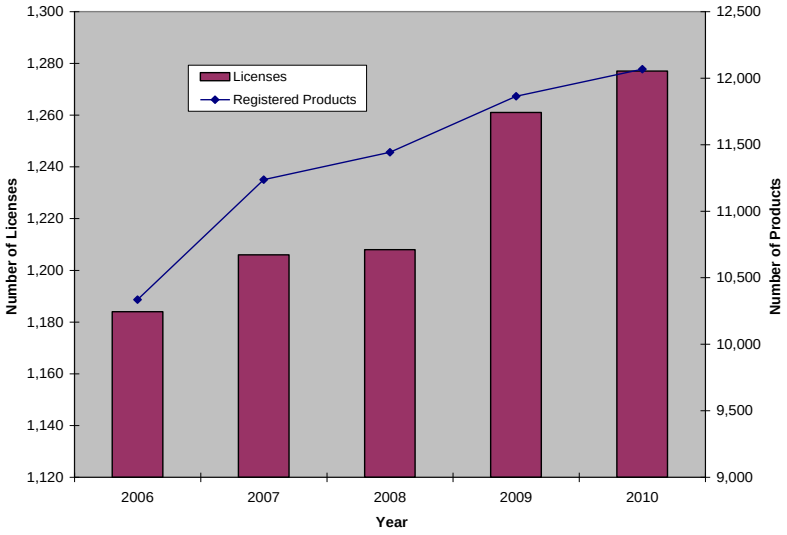
The pesticide programs cover a variety of pesticide activities, including product registration and licensing, worker protection, landscape registry, special registrations and school integrated pest management.

Pesticide Registry and Licensing

Prior to the distribution of pesticides for use in Wisconsin, pesticide manufacturers and labelers must be licensed and register their products in the state. Licensing ensures that products offered for sale in Wisconsin are properly registered by EPA, and creates a level playing-field for the pesticide industry. License fees are based on the type of product and the amount of product estimated to be sold in the current year. These fees are part of the ACM fund that supports the work of all of the department's pesticide-related programs.

The program requires licensees to calculate product registration fees based on estimated sales for the current licensing year. At the end of a licensing year, the licensee reconciles the fees based on the actual sales for the previous year. The program continues to review the licensing system to find ways to make this process more efficient for the department and licensees.

Chart 9: Pesticide Product Licensing and Registration (2006-10)



Program Activities

Staff renewed or issued pesticides licenses to 1,277 manufacturers and labelers in 2010 and registered 12,067 pesticide products, a slight increase from 2009 licenses and products. Most products are registered for household, industrial, or non-household use with sales under $25,000.

Worker Protection

The Department of Agriculture, Trade & Consumer Protection implements regulations of the US Environmental Protection Agency (EPA) and adopted them into ch. ATCP 29, Wis. Adm. Code to protect employees on farms, forests, nurseries, and greenhouses who are at greatest risk from occupational exposure to agricultural pesticides. Known as the federal Worker Protection Standard (WPS), these rules require employers to protect their workers and handlers who apply pesticides or work in pesticide treated areas. WPS rules require employers to provide these employees with pesticide application locations, entry restrictions, pesticide safety training, personal protective equipment, decontamination supplies, and emergency medical information.

Program Activities

WPS is implemented in Wisconsin through two mutually supportive fronts: prevention and enforcement.

Based on its evaluation of industries' practices and past inspection findings, the WPS program sets an annual plan to conduct outreach, provide individual and industry-wide assistance and continue to monitor for and ensure compliance. WPS is a relatively small inspection program. To obtain as accurate as possible picture of WPS compliance and use that data to direct future activities, the program alternates inspection years between food and non-food related establishments. The 2010 inspections concentrated on food production establishments, while 2011 inspections will focus on the non-food sector, like sod and Christmas Tree production.

Outreach

The vegetable, fruit and fresh market growers, the relatively new vineyard industry, Christmas tree producers, nurseries and greenhouses have professional organizations which can provide members with WPS information. However, not all producers choose to be members, and some smaller, more independent enterprises may not have access to pesticide safety updates.

In 2010, the WPS program increased its efforts to work with employers of agricultural workers. By collaborating with industry, the department was able to deliver formal training to five of the state's producer associations, meet with individual producers on request and provide tools that meet their needs before violations occur. Prevention is better for businesses in terms of less down time, no fines and penalties, and is ultimately better for the health and safety of the people they employ.

Industry and the UW West Madison Research Station's assistant superintendent works with the WPS program, covering emerging production and research issues so the department can tailor information to handle specific challenges, such as unexpected pest emergence, ephemeral labor needs and availability or lack of trainers for specialized workers.

Compliance

In 2010, the program conducted 31 inspections and the program's federal inspection commitments were met by mid-September. Sites inspected were predominantly fruit production, nurseries, berries, corn for seed expansion (since the latter employ detasslers), and one research facility. Twenty-five inspections occurred within the Restricted Entry Interval (REI) or 30 days beyond the REI – the higher risk timeframe when pesticide residues are present. Fifty-two code violations were identified, approximately 30% of which were central posting, worker training, PPE and field signage. Five warning letters or notices were issued. Three situations were escalated to orders, further investigation or forfeiture. One case was referred to the District Attorney after repeated failed efforts to gain compliance, resulting in a forfeiture and a deferred forfeiture if a DATCP re-inspection results in further violations.

Beginning in mid-summer, the WPS staff worked with in the Wisconsin migrant labor law enforcement staff to exchange information and determine areas of mutual support and referral.

Emerging Issues

The program is monitoring changes to soil fumigant labels and working to assimilate any new impact to the WPS program. Members of the department's pesticide programs have asked EPA to blend the two requirements in user-friendly outreach for industry and state lead agencies' use in outreach and compliance.

The department continues to monitor US EPA's impending revision to the WPS and its impacts on Wisconsin producers. Meanwhile, the free federal training materials which DATCP would traditionally provide industry have depleted.

Special Registrations

The Special Registrations program responds to emergencies and special pest management needs of Wisconsin's agriculture producers and others. Most special registrations pertain to minor food crops, where effective pesticide products have not yet been fully registered or labeled for use in crop management situations involving newly arriving or burgeoning populations of pests. Users must obtain, and have in their possession at the time of application, authorized special use directions to legally use pesticide products for the purposes specified under the special registration. The department processes requests for two types of "special registrations," emergency exemptions and special local need (SLN) registrations. In emergency exemptions, EPA establishes temporary food tolerances for time-limited use of these pesticide products to prevent significant economic loss, prevent significant health risks posed to humans or other animals, or address crises of imminent threat. For an SLN registration, the program authorizes time-limited uses of pesticides to meet a routine, non-emergency need when other pesticides are not registered for the needed use or may not be effective.

In 2010, the program issued four SLN registrations to replace expired SLN registrations where the special local need situation still existed. These registrations related to fungus control in potatoes, fungus control in ginseng, and weed control in strawberries. The program also amended an expired SLN registration to extend the expiration date for use of sodium hypochlorite in controlling an invasive species of crayfish. The program also responded to, but did not issue SLN registrations for, other inquiries related to weed control in ginseng and emerald ash borer control in ash trees.

Several emergency exemptions expired in 2009 and EPA reauthorized their uses for 2010. These exemptions related to varroa mite control in beehives, sandhill crane control in corn fields, onion thrips control in dry bulb onions, weed control in strawberries, and insect larvae control in ginseng. In addition, the program declared crisis emergency situations related to fungus control in ginseng and crayfish control in specific ponds. The program also responded to other inquiries related to fungus control in potatoes, fungus control in ginseng, and bacteria control in potato process/storage.

Emerging Issues

The main emerging issue for special registrations continues to be invasive species. Prior to 2010, the program previously issued special local needs registrations for control of emerald ash borer (EAB) and red swamp crayfish. As more and new invasive species enter Wisconsin, additional requests for special registrations are anticipated.

Integrated Pest Management

The Integrated Pest Management (IPM) program provides support to Wisconsin's K-12 schools and other industries that want to develop customized IPM plans to meet their individual pest management needs and goals. The program makes available the regulatory, technical and administrative information necessary to manage pests and use pesticides safely. The program offers IPM training and pest and pesticide consultation to people who work in both school and non-school settings.

Program Activities

During the year, the program continued to respond to public inquiries regarding the Wisconsin School IPM Manual, the state certification and posting regulations for schools, and services provided by the program. The program also monitored efforts of the North Central Region School IPM Working Group to assist with a national initiative to implement high-level IPM in all schools in the United States by 2015. The program also continued its work developing an integrated pest management resource for Christmas Tree growers, through a specialty crop grant funded by USDA. This resource will be available by the end of 2011.

Pesticide Use

Wisconsin law requires strict compliance with directions on labeling associated with EPA-registered pesticide products including storage, handling, and use. The pesticide program reviews all pesticide use inspections for trends and needed follow-up with industry or the public. Many of the Compliance Section's activities (see earlier section in this report) are inspections of these practices and their associated records, as well as investigations of potential violations of the general label provisions or specific prohibitions contained in Ch. ATCP 29, Wis. Adm. Code. In 2008, the ATCP Board approved a scope statement to open ATCP 29 for revision. Staff continue to work on revisions to ATCP 29 during 2010. Major issues being considered during the rule revision process are aquatic applications, structural applications, consistency with Ch. ATCP 33, Wis. Adm. Code, and residential chemigation systems.

Landscape Registry

Since January 1993, ch. ATCP 29, Wis. Adm. Code, has required professional lawn and landscape companies to notify neighboring residents (who have requested this information) prior to applying pesticide treatments and to post landscapes that have been treated with pesticides. This information provides the public the information they need to be aware of pesticide applications so they may take steps to avoid possible exposure from pesticides to themselves, their children, or their pets.

The names and telephone numbers of persons wishing to be notified of neighboring landscape applications are maintained by the program on an annual registry and provided to all licensed landscape businesses, which are required to provide the notice. No fee is required to be on the registry. Persons may list any property for which they want advance notification on their block of residence or any immediately adjoining blocks.

Program Activities

Nine hundred and eighty-five people applied to be on the landscape registry in 2010. They listed 14,351 addresses for which they requested advance notification of pesticide applications in their neighborhoods, down slightly from 2009. The department received 54 complaints related to non-notification, and sent 29 warning letters, two letters of concern, and two cases where a warning was sent became assigned investigations for field staff concerning other issues. In general, the landscape companies continue to be cooperative in working with the department to make this program successful.

Emerging Issues

The ACM Bureau is moving to electronic registration as a mechanism to streamline this program and reduce the cost to implement the registration.

Water Quality Protection through Pesticide Management

One of the department's responsibilities is to implement regulations to protect groundwater from pesticide and nutrient contamination. Staff identify, monitor and analyze problem areas within the state, investigate wells that exceed groundwater standards to identify potential sources of contamination, and conduct statewide sampling surveys to characterize groundwater contamination and to evaluate the effectiveness of the department's water quality activities.

Water Quality Highlights

- ✶ 176 Groundwater Samples Analyzed
- ✶ 61 Surface Water Samples Analyzed
- ✶ 4 Groundwater Investigations
- ✶ 17 Different Compounds Detected in Groundwater

Private Well Monitoring

Private Well Sampling (Exceedance Survey)

In 2010, staff collected and analyzed groundwater samples from 41 private wells that have historically exceeded groundwater enforcement standards to track how the pesticide and nitrate-N levels in these highly-impacted wells are changing over time. Most of these wells are in atrazine prohibition areas and most have shown declines in atrazine concentration. As of 2010, five wells remain above the atrazine enforcement standard. In 2010 staff prepared a comprehensive report on the results of 15 years of sampling in the Exceedence Survey. This report can be found at:
http://datcp.wi.gov/uploads/Environment/pdf/FifteenYearsoftheDATCPExceedenceSurvey.pdf

Private Well Sampling (Targeted)

The purpose of DATCP's Targeted Sampling effort is to collect groundwater samples from potable wells in "environmentally sensitive" areas across Wisconsin and analyze those samples for nitrogen and pesticides. In general, the targeted sampling effort focuses on areas where fewer samples have been analyzed for agrichemicals in the past.

Eight areas were "targeted" for sampling in 2010 and a total of 61 wells were sampled in these areas. Of the 61 wells sampled, nitrogen was detected in 40 samples, or in 66 percent of the wells. Nitrate nitrogen was detected above the enforcement standard 10 ppm in 14 wells, or 23 percent of the wells.

Atrazine TCR was detected in 8 percent of the wells that were sampled. This is slightly below the estimated statewide proportion of wells with atrazine TCR of 11.7 percent. Atrazine TCR was not detected above the enforcement standard of 3.0 ppb in any of the wells sampled, so no follow up investigations were conducted.

The two most commonly detected pesticide metabolites in the 2010 Targeted Sampling project were metolachlor ESA and alachlor ESA, which were detected in approximately 51 percent and 23 percent of the wells sampled, respectively. Metolachlor ESA and alachlor ESA were also the two most commonly detected pesticides in the 2007 statewide groundwater survey, with approximately 21.6 percent of the wells having detectable concentrations.

The only other pesticide metabolite identified in the targeted samples with any significance was alachlor OA, which was detected in seven of the sampled wells.

Monitoring Well Program

The primary goal of the groundwater monitoring well program is to collect data to identify pesticides that contaminate groundwater and develop regulations to prevent contamination above applicable groundwater standards. The department also provides information to the public and to other state and federal agencies involved in water resource protection.

In 2010, staff collected 74 groundwater samples from 26 field-edge monitoring well sites and analyzed them for nitrate-N and pesticides of interest. Table 10 is a summary of the groundwater sample results from the field-edge monitoring well project. It shows that seventeen different compounds were detected in groundwater monitoring wells but only nitrate-N exceeded its groundwater enforcement standard (10 parts per million). Section staff also monitored groundwater at two forest seedling nursery sites to determine if pesticides used in nursery production could cause groundwater contamination.

Table 10: Summary of Groundwater Sample Results for the Monitoring Well Project

Compound	Percentage of Sites with Detects (out of 26 Sites)	Detect Range (parts per billion)	Groundwater Enforcement Standard (parts per billion)
Acetochlor	0	not detected	7
Acetochlor ESA	8	0.179 to 4.36	230 *
Acetochlor OA	0	not detected	230 *
Alachlor	0	not detected	2
Alachlor ESA	65	0.131 to 11.5	20
Alachlor OA	15	0.108 to 0.654	
Atrazine	8	0.16 to 0.175	
Deethyl Atrazine	4	0.306 to 0.324	
Deisopropyl Atrazine	12	0.307 to 0.715	
Diamino Atrazine	4	0.652 to 0.768	
Total Atrazine (TCR)	24	0.16 to 1.146	3
Clothianidin	15	0.366 to 3.43	
Cyanazine	0	not detected	1
Hydroxysimazine	0	not detected	
Imidacloprid	8	2.19 to 3.34	
Metolachlor	15	0.51 to 7.78	100
Metolachlor ESA	92	0.101 to 191	1,300 *
Metolachlor OA	69	0.131 to 130	1,300 *
Metribuzin	23	0.05 to 5.4	70
Simazine	0	not detected	4
Thiamethoxam	19	0.524 to 5.27	
Nitrate-N	96	1.02 to 52.3mg/l	10 mg/l
Nitrate-N over ES	81	10.3 to 52.3mg/l	10 mg/l

* Standard is based on the sum of ESA and OA metabolites

Groundwater Investigations

In 2010, staff worked on four groundwater investigations at private well sites that exceeded an enforcement standard for atrazine, alachlor or simazine. These investigations resulted in revisions to ch. ATCP 30 that created new atrazine prohibition areas in Sauk and Columbia counties. They also led to special orders issued to several growers near Spring Green that prohibit further uses of simazine on specific fields.

Surface Water Sampling

The department, in cooperation with Department of Natural Resources regional water biology staff, collected surface water samples on a monthly basis from four streams in smaller watersheds across Wisconsin. Three of the streams were sampled as a follow up to the 2008 Surface Water Sampling project, and the fourth was added in 2009. In 2010 the department's Bureau of Laboratory Services analyzed a total of 61 surface water samples for seven common pesticides and their breakdown products as a part of this project.

The results of the surface water sampling confirmed that low concentrations of pesticide products enter the streams during or after the main pesticide application season and storm events in June and July. The results also show that low levels of pesticide metabolites, predominately metolachlor ESA and alachlor ESA, enter the stream as base flow (groundwater) independent of the timing of pesticide application or river stage. Other pesticide metabolites found that are likely being discharged into the streams as a part of base flow throughout the year include metolachlor OA, acetochlor ESA, and alachlor OA.

Emerging Issues

In 2010 we detected clothianidin and imidacloprid, two other insecticides in the neonicotinoid class of insecticides, in several monitoring wells. Combined with detects of the insecticide thiamethoxam in 2008 and 2009, the program will continue to evaluate the use of these products and occurrences in groundwater to determine if additional measures are needed to prevent impacts to drinking water.